

of

4



attack Paper 5

PTO/SB/8A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

A-63470-7/RFT/JJD

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. Complete if Known titute for form 1449A/PTO Application Number 09/628,568 ORMATION DISCLOSURE Filing Date July 31, 2000 TEMENT BY APPLICANT First Named Inventor PRESTA, Leonard G. Group Art Unit 1644 (use as many sheets as necessary) Examiner Name

Attorney Docket Number

				U.S. PATENT DOCU	JMENTS	<u> </u>
Examiner Initials*	Cite No.1	· [Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document	Pages, Columns, Lines, Where Relevant
		Number	Kind Code ² (if known)	of Cited Document	MM-DD-YYYY	Passages or Relevant Figures Appear
ans	1	5,475,091		Springer et al.	12/1995	
Jour	2	5,489,533		Springer et al.	2/1996	
			<u></u>		<u> </u>	
				,		
					·	
		-				
			··			
						· · · · · · · · · · · · · · · · · · ·
	•					

				FOREIGN PATENT DOCUME	NTS		
Examiner Initials*	Cite No.1			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Τ°
	3	EP	0 239 400	Winter et al.	09/1987		
Sus	4	wo	93/22332		11/1993		
way	5	wo	94/04689	Pastan et al.	11/1994		lacksquare
<u> </u>						·	
							1
	├						+-

				· · · · · · · · · · · · · · · · · · ·
Examiner Signature	Daina Saun	Leve Date Cons	idered 8/	8/01

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English Language Translation is attached.

PTO/SB/8B (08-00)

Approved for use through 10/31/2002. OMB 0651-0031 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

A-63470-7/RFT/JJD

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Complete if Known

Application Number 09/628,568 PECEIVED

TEMENT BY APPLICANT

Filing Date July 31, 2000

First Named Inventor PRESTA, Leonard G. MAY 1 7 21 01

Group Art Unit 1644

Examiner Name TECH CENTER 160 0/2900

Attorney Docket Number

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
Yos	6	Diegel, M.L. et al., "Regulation of HIV Production by Blood Mononuclear Cells from HIV-Infected Donors: II. HIV-1 Production Depends on T-Cell-Monocyte Interaction," AIDS Research and Human Retroviruses, 9(5):465-473 (1993).	
bus	7	Batra, J.K. et al., "Insertion of constant Region Domains of Human IgG.sub.1 Into CD4-PE40 Increases Its Plasma Half-Life," Molecular Immunology, 30(4):379-386 (1993).	
Gold	8	Kim, JK. Et al., "Catabolism of the Murine IgG1 Molecule: Evidence that Both CH2-CH3 Domain Interfaces are Required for Persistence of IgG1 in the Ciruculation of Mice," Scand. J. Immunol., 40:457-465 (1994).	
Dus	9	Traunecker et al., "Bispecific single chain molecules (Janusins) target cytotoxic lymphocytes on HIV infected cells," EMBO J. 10(12): 3655-3659 (1991).	
Soul	10	Brambell, "The Transmission of Immunity from Mother to Young and the Catabolism of Immunoglobulins" Lancet pp. 1087-1093 (Nov. 19, 1966).	
Day	11 .	Brambell et al., "A Theoretical Model of .gammaGlobulin Catabolism" Nature 203:1352-1355 (1964).	
رفاف	12	Deisenhofer, "Crystallographic Refinement and Atomic Models of a Human Fc fragment and Its Complex with Fragment B of Protein A from Staphylococcus aureus at 2.9- and 2.8-A Resolution" Biochemistry 20(9):2361-2370 (1981).	
Sal	13	Dima et al., "Effect of protein A and its fragment B on the catabolic and Fc receptor sites of IgG" European Journal of Immunology 13:605-614 (1983).	
soul	14	Ellerson et al., "Isolation and Characterization of a Fragment Corresponding to the C.gamma. Homology Region of Human Immunoglobin G.sup.1." Journal of Immunology 116(2):510-517 (Feb. 1976).	
DU	15	Kim et al., "Identifying amino acid residues that influence plasma clearance of murine IgGa fragments by site-directed mutagenesis" European Journal of Immunology 24:542-548 (1994).	
Day	16	Knauff et al., "Relationship of Effective Molecular Size to Systematic Clearance in Rats of Recombinant Interleukin-2 Chemically Modified with Water-soluable Polymers" Journal of Biological Chemistry 263:15064-15070 (1988).	

Examiner Signature Date Considered 8901

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English Language Translation is attached.

PTO/SB/8B (08-00)

Approved for use through 10/31/2002. OMB 0651-0031 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

	Under the Paperwork Reduction Act of 1995, no persons are required to respond	and to a collection of information	unless it contains a valid ON	MB control number.	_		
1	P Substitute for form 1449B/PTO	Complete if Known					
O ,	\ \tag{\}	Application Number	09/628,568	RECEN	/Er		
	INFORMATION DISCLOSURE	Filing Date	July 31, 2000	1021			
4AY	INFORMATION DISCLOSURE 1 5 STATEMENT BY APPLICANT	First Named Inventor	PRESTA, Leonard G.	MAY 1 7 2	001		
		Group Art Unit	1644	TEAL	001		
31	(use as many sheets as necessary)	Examiner Name		TECH CENTER 16	10/20n		
•	Sheet 3 of 4	Attorney Docket Number	A-63470-7/RFT/JJD		10/230		

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
Lale	17	Masson, "Elimination of Infectious Antigens and Increase of IgG Catabolism as Possible Modes of Action of IVIg" Journal of Autoimmunity 6:683-689 (1993).	
Das	18	Nose et al., "Biological significance of carbohydrate chains on monoclonal antibodies" Proc. Natl. Acad. Sci. USA 80:6632-6636 (Nov. 1983).	
Jul	19	Pollock et al., "Intravascular metabolism of normal and mutant mouse immunoglobulin molecules" European Journal of Immunology 20:2021-2027 (1990).	
pool	20	Spector, "The reabsorption of labelled proteins by the normal and nephrotic rat kidney" J. Path. Bact. 68:187-196 (1954).	
Sus	21	Spiegelberg, "Biological Activities of Immunoglobulins of Different Classes and Subclasses" Advances in Immunology 19:259-294 (1974).	
jul	22	Spiegelberg et al., "The Catabolism of Homologous and Heterologous 75 Gamma Globulin Fragments" J. of Experimental Medicine, Dubos et al. vol. 121(1):323-338 (1965).	
Dal	23	Tao et al., "Role of Carbohydrate in the Structure and Effector Functions Mediated by the Human IgG Constant Region" Journal of Immunology 143(8):2595-2601 (Oct. 15, 1989).	
oou	24	Waldmann et al., "Catabolism of Immunoglobulins" Progress in Immunology 1:1187-1191 (1971).	
Dal	25	Wawrzynczak et al., "Blood Clearance in the Rat of a Recombinant Mouse Monoclonal Antibody Lacking the N-Linked Oligosaccharide Side Chains of the C.sub.H 2 Domains" Molecular Immunology 29(2):213-220.	
Des	26	Wawrynczak et al., "Recombinant Mouse Monoclonal Antibodies with single Amino Acid SubstitutionsAffecting C1q and High Affinity Fc Receptor Binding Have Identical Serum Half-lives in the BALB/c Mouse" Molecular Immunology 29(2):221-227 (1992).	
Loc.	27	Wochner et al., "The Role of the Kidney in the Catabolism of Bence Jones Proteins and Immunoglobulin Fragments" Journal of Experimental Medicine 126(2):207-221 (Aug. 1, 1967).	

		<u> </u>				
Examiner Signature	David A	alender	Date Considered	5/	9/01	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English Language Translation is attached.

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE Under the Denominary Padvetion Act of 1005

	P Solution form 1449B/PTO	Complete if Known			
0		Application Number	09/628,568		
84 414	INFORMATION DISCLOSURE	Filing Date	July 31, 2000		
MAY	1.5 STATEMENT BY APPLICANT	First Named Inventor	PRESTA, Leonard G.		
, i		Group Art Unit	1644		
20 7	(use as many sheets as necessary) Sheet 4 of 4	Examiner Name			
)	Sheet 4 of 4	Attorney Docket Number	A-63470-7/RFT/JJD		

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
Jul	28	Yasmeen et al., "The Distribution of effector Functions Among the C.gamma.2 and C.gamma.3 Homology Region Immunoglobulin G.sup.1 " Journal of Immunology 116(2):518-526 (Feb. 1976).	
Sur Sur	29	Zuckier et al., "Immunologic and Pharmacologic Concepts of Monoclonal Antibodies" Seminars in Nuclear Medicine 19(3):166-186 (Jul. 1989).	
Dal	30	Zuckier et al., "The Use of Severe Combined Immunodeficiency Mice to Study the Metabolism of Human Immunoglobulin G" Cancer Supplement 73(3):794-799 (Feb. 1, 1994).	

					<u> </u>		
Examiner Signature	David a X	aunden	Date Considered	8/	91	01	
					- 1		 *

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English Language Translation is attached.